|  |  |  |
| --- | --- | --- |
| ITU logo | INTERNATIONAL TELECOMMUNICATION UNION**TELECOMMUNICATIONSTANDARDIZATION SECTOR**STUDY PERIOD 2017-2020 | **DOC 24**  |
| **Collaboration on Intelligent Transport Systems Communication Standards** |
| **Original: English** |
| **Question(s):** |  | Geneva, Switzerland, 9 March 2018 |
| **DOCUMENT** |
| **Source:** | Chairman, Collaboration on ITS Communication Standards |
| **Title:** | Report (CITS meeting, 9 March 2018, Geneva) |
| **Purpose:** | Information |
| **Contact:** | T.Russell ShieldsYgomi LLCUnited States | Tel:Fax:Email: trs@ygomi.com |
| Please don’t change the structure of this table, just insert the necessary information. |

**Draft Report – Meeting of Collaboration on ITS Communication Standards**

***(9 March 2018, Geneva)***

[**http://itu.int/go/ITScomms**](http://itu.int/go/ITScomms)

1. **Introduction**

The meeting of the Collaboration on ITS Communication Standards (CITS) took place on 9 March 2018, Geneva at the International Telecommunication Union (ITU) premises in Geneva, Switzerland, kindly hosted by the ITU. Russell Shields (Ygomi LLC) chaired the meeting assisted by Stefano Polidori (ITU/TSB Advisor).

The meeting was organized in conjunction with the **ITU/UNECE** **Symposium on *The Future Networked Car (***[***FNC-2018***](https://www.itu.int/en/fnc/2018/Pages/default.aspx)), which was held the previous day (8 March 2018) at the Geneva Motor Show.

1. **Opening, meeting participants and adoption of the agenda**

**T. Russell Shields**, Chair of CITS, opened the meeting and provided background information on the Collaboration on ITS Communication Standards (CITS) and its role. He clarified that the CITS is not a standards-setting body, but a standards-facilitating group, mainly used for exchanging information and promoting Collaboration to support ITS communications standards.

The aim of CITS is to provide a globally recognized forum for the creation of an internationally accepted, globally harmonized set of ITS communication standards of the highest quality in the most expeditious manner possible to enable the rapid deployment of fully interoperable ITS communication-related products and services in the global marketplace.

The TSB Advisor explained that the Collaboration is following a yearly cycle of three meetings and three workshops: (1) March, during Geneva Motor Show; (2) summer in Asia; (3) late fall in the Americas.

The Chair invited all participants present on site as well as those connected remotely to introduce themselves. **34** participants joined the meeting representing various Standards Development Organizations (SDOs) and other stakeholders, of which **15** joined remotely and **19** on site. The list of participants is available and posted as [Doc 23](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/23_Final-list-participants-CITS.pdf).

A total of 23 meeting documents were submitted. This meeting report was posted as Doc 24 after the meeting. All related meeting documents were openly accessible by everyone in the CITS SharePoint site:

<https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva>

The draft agenda was adopted as in [Doc 1](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/01_Chair_draft_agenda.docx).

1. **Wrap-up of ITU/UNECE** **Symposium on *The Future Networked Car (***[***FNC-2018***](https://www.itu.int/en/fnc/2018/Pages/default.aspx)) **(8 March 2018)**

The day before the CITS meeting, the **Symposium on *The Future Networked Car (***[***FNC-2018***](https://www.itu.int/en/fnc/2018/Pages/default.aspx))was held and participants expressed appreciation for the organization, format and quality of the panelists of this annual conference that has been held since 2005 and is always co-located with the Geneva International Motor Show.

The Symposium was organized in four sessions, each featuring six panelists and about ninety-minute panel discussion on a specific theme. A short presentations (about five minutes) by each of the six panelists focused on what their company or organization contributes toward solving a particular problem related to the theme. This format allowed plenty of time for questions from the moderator, other panelists and the attendees.

The bios of the panelists can be seen at: <https://www.itu.int/en/fnc/2018/Pages/Biographies.aspx>

The following themes were covered by the Symposium:

***– High Level Roundtable – Connected and automated vehicles at the cross-road to success***

***– Session 1 - Ubiquitous connectivity: 5G, AI and big data changing the game***

***– Session 2 – Cybersecurity impact and outlook for automotive systems***

***– Session 3 – The deployment of automated mobility services: what is needed?***

The event this year was held on the International Women’s Day and it was noted that the vehicle industry in general, and vehicle electronics in particular, remains very much a male-dominated area.

The Symposium was opened by Malcolm Johnson, Deputy Secretary General of ITU, who highlighted that the mission of ITU is aligned with the U.N.’s seventeen Sustainable Development Goals, which are aimed at ending poverty, protecting the planet and ensuring prosperity for all. They were established on the 25th of September, 2015, and are aimed at being achieved in 2030. Some opening remarks from the co-organizer, the UNECE, were given by Yuwei Li, newly appointed Director of the Sustainable Transport Division. A keynote speech was provided by a very well-known expert on Formula 1, having led the Ferrari team for long time, Jean Todt, UN Secretary General’s Special Envoy for Road Safety and President of FIA, who encouraged the attendees redouble our efforts to work toward a future of accident-free road transport.

See the symposium programme at: <https://www.itu.int/en/fnc/2018/Pages/programme.aspx>

An overview of the discussion in each session was provided by Michael Sena, who moderated Session 3 and who is Editor of a related-newsletter “The Dispatcher”. Find the Special issue of [*The Dispatcher (04-2018*](https://www.itu.int/en/fnc/2018/Documents/The_Dispatcher_April%202018.pdf)*)*, that provides an Overview of the Symposium.

1. **Status of ITS communications work in various SDOs**

**4.1** [**SAE International**](http://www.sae.org/)

[[Doc 4](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/04_LS_SAE_establishment-SAE-Cellular.docx) and [Doc 5](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/05_SAE%20C-V2X%20Technical%20Committee.pptx)] were submitted by SAE and presented by Jim Misener, Qualcomm in collaboration with Jack Pokrzywa, SAE International both from remotely. They provide updates from the **SAE C-V2X Technical Committee**, which was recently established (June 2017) with the following motivation and scope.

***– Motivation:*** *Most V2X standards are not neutral with communication protocol, nor do they recognize the unique properties of C-V2X and impending 5G technologies.*

***– Scope****: Adapting and developing standards, recommended practices and information reports that use cellular radio access technologies and specifically, evolving 4G LTE and 5G cellular technologies that require interoperability and performance standards for road vehicles and other road users in order to use the full capabilities of these technologies.*

[[Doc 18](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/18_SAE%20DSRC%20Tech.Committee%20Activity.pptx)] was submitted by SAE and presented by Sue Bai, Chair SAE DSRC, Honda, who was connected remotely. It provides an overview of the work of the **SAE DSRC Technical Committee**, which has the following scope:

***– Scope:*** *Develop and maintain V2X message set and application standards/recommended practices for interoperability, with short- to medium-range wireless communication protocols*

[[Doc 15](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/15-SAE%20International%20presentation_to_CITS.pptx)] was submitted by SAE and presented byS. William (Bill) Gouse, SAE International, who was connected remotely. It provides an overview of US Federal, State, Local Updates regarding Connected and Automated Vehicle policy, Legislation and Regulations.

**4.2** [**TTC WG on Connected Car**](http://www.ttc.or.jp/e/organization/wg/connectedcar/)

Yushi Naito, Mitsubishi Electric, Japan, could not join the meeting so Fernando Masami MATSUBARA, Rapporteur of Q27/16, provided an oral update from TTC on his behalf.

TTC has a Connected Car working group. A Technical report 1068 was developed. It is currently in Japanese but will be soon translated in English. It addresses remote SW update over the air.

**4.3** [**WWRF VIP WG The Connected Car**](http://www.wwrf.ch/vip-wg-the-connected-car.html)

[[Doc 8](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/08_WWRF%20Liaison%20Report_to_CITS.pptx)]was submitted by WWRF and presented by Nigel Jefferies, Chair WWRF. It provides a presentation on their activities related to CITS. The WWRF has a committee **VIP CV WG: The Connected Vehicle**, which has the following scope:

***– Scope:*** *The VIP WG focuses on research that looks five to ten years ahead in order to meet the requirements of the automotive and transport industries based on the next generation wireless technology. It also aims at the identification of use cases for these industries.*

**4.4** [**ISO TC 204**](https://www.iso.org/committee/54706.html)

[[Doc 21](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/21_TC204-Status-Report.pptx)] was submitted by TC204 and presented by Dick Schnacke, TC 204 Chair. It provides a detailed progress report on activities related to CITS.

The Secretariat of TC204 is provided by SAE International. TC 204 has now a formal relationship with UNECE and collaborates with ISO TC 22 and CEN/TC278 WG7

ISO TC 204 has a total of 397 projects of which 144 are under development and 253 published with 29 open ballots.

It was noted that there are too many initiatives on the cybersecurity for vehicles. It would be nice if this collaboration group (CITS) be performing a review of what is taking place in the world. It was also noted that the overall coordination is taking place at the UNECE TF on cybersecurity and OTA issues and their next meeting is in Seoul the week before the meeting of ISO TC 204 (planned 23-27 April 2018), this may help the collaboration.

See the report for details on approved standards and ongoing work. The 52th Plenary of ISO TC 204 is planned in Hamburg, Germany, fall 2018.

**4.5** [**IEEE VTS Standards**](http://www.vtsociety.org/index.php?option=com_content&view=article&id=71&Itemid=73)

[[Doc 10](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/10_IEEE%20presentation_to_CITS.zip)] was submitted by IEEE and provides a detailed progress report on activities related to CITS. It was not presented as Tom Kurihara, Chair IEEE 1609 WG, was not able to join remotely.

**4.6** [**UNECE WP.29**](http://www.unece.org/trans/main/wp29/introduction.html)

Russ Shields briefly introduced the work of UNECE WP.29 related to ITS communications.

Three working groups under WP.29 are of particular interest to the ITS communications:

1. *Informal Working Group on ITS/Automated Driving (IWG ITS/AD)*. Reporting to WP.29. The documentation of IWG ITS/AD is available [here](https://www2.unece.org/wiki/pages/viewpage.action?pageId=2523344).
2. *UNECE Task Force on cybersecurity and over-the-air issues (CS/OTA)*. Reporting to IWG ITS/AD. The documentation of CS/OTA is available [here](https://www2.unece.org/wiki/pages/viewpage.action?pageId=40829521). ITU representatives are actively participating in this activity.
3. *Informal Working Group on Accident Emergency Call Systems (IWG AECS)*. Reporting to WP.29. The documentation of IWG AECS is available [here](https://www2.unece.org/wiki/pages/viewpage.action?pageId=14319865).

WP.29 convenes officially three times per year (March, June, and November) and entrusts informal groups with specific problems that need to be solved urgently or that require special expertise. ITU has a standing invitation to participate in WP.29 and its working groups, and is promoting the use of international standards in these activities.

**4.7** [**5GAA**](http://5gaa.org/)

[[Doc 6](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/06_5GAA%20presentation_to_CITS.pptx)] was submitted by 5GAA and presented by Stefano Sorrentino, Chair WG2/5GAA. It provides a presentation on the 5GAA activities and constituencies. 5GAA was created with the aim to connect telecom industry and vehicle manufacturers and work closely together to develop end-to-end solutions for future mobility and transportation services. Safety is very high on the 5GAA agenda.

One year old, started with 12 companies and has already more than 70 companies. 12 stable funding members plus four that rotate yearly. General Assembly take place twice a year. Includes five working groups. Is not an SDO but collaborate actively with other SDOs especially ETSI and 3GPP. 5GAA explicitly supports 3GPP technologies.

C-V2X use cases are shown in details in the slides.

**4.8** [**CCSA**](http://www.ccsa.org.cn/english/tc.php?tcid=tc10)

[[Doc 17](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/17_CAICT%20presentation_to_CITS.pptx)] was submitted by CCSA and presented remotely by Yuming Ge, ITS expert from CAICT. It provides a detailed progress report on activities related to CITS.

China is very active on C-V2X research and studies. C-V2X is not only a communications network involving information exchange of vehicles, roads, people, and cloud services, but also a comprehensive service system dedicated to travels and traffic management. C-V2X requires full cooperation and collaboration of the involved industries. The Ministry of Industry and Information Technology (MIIT) together with other Ministries in China set up the “connected vehicles industry development committee” to tackle the coordination and communication, as well as promoting industry development on this topic.

The China Communications Standards Association (CCSA), China ITS Industry Alliance (C-ITS), and Society of Automotive Engineers of China (SAEC) engage in researching and formulating C-V2X standards. The standards also cover the requirements for the LTE-V2X system architecture, spectrum resources, air interfaces, network layer and application layer, security, other technologies, and LTE-V2X-related devices. A roadmap for 2017 and 2018 for the IMT-2020 C-V2X Group is provided in the slides.

**4.9** [**IETF-IPWAVE**](https://datatracker.ietf.org/wg/ipwave/about/)

[[Doc 7](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/07_IETF%20presentation_to_CITS.pdf)] was submitted by IETF IPWAVE “IP Wireless Access in Vehicular Environments” and presented remotely by Carlos Jesús Bernardos Cano, co-Chair IETF IPWAVE WG. It provides a detailed progress report on activities related to CITS. The IPWAVE is working on V2V and V2I use-cases, where IP is well suited and is developing an “IPv6 based solution to establish direct and secure connectivity between a vehicle and other vehicles or stationary systems”. Contributions are welcome to see what other topics could be addressed by the group.

**4.10** [**W3C Automotive WG**](https://www.w3.org/auto/wg/)

[[Doc 16](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/16_W3C%20status%20report%20to%20CITS.docx)] was submitted by W3C and presented Ted Guild remotely. It provides a detailed progress report on activities related to CITS. See also current activity slide deck: <https://www.w3.org/auto/slides>.

W3C Automotive Activity has two groups:

- Automotive Webplatform Business Group

- Automotive Working Group

First draft of the new specification, Vehicle Information Service Specification ([VISS](https://www.w3.org/TR/vehicle-information-service/)) is available and in February was progressed as a stable draft and Candidate Recommendation.

The Business Group focused on navigation, media and privacy and security. VISS also attracted the interest of The Volkswagen Group that is now contributing

W3C is re-chartering the Working Group to complete VISS and work with VW on their contributions.

W3C is also forming a connected vehicle cybersecurity research group.

W3C Web Payments Working Group has produced specifications with all major browser vendors and payment providers to streamline and better secure credit card transactions online.W3C is exploring this solution to automotive use cases such as fueling/recharging, tolls, parking, services and content.

It was noted that a structure could be put together so that W3C efforts be channeled into ITU-T Study Groups. Also W3C was advised to participate into UNECE TF on OTA and other issues to coordinate on Cybersecurity efforts.

**4.11** [**ATIS Connected car**](http://www.atis.org/01_strat_init/connectedcar/)

[[Doc 13](https://staging.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/13_ATIS_C-CAR-for-CITS.pptx)] was submitted by ATIS and presented remotely by Denis Niles, Senior Mobile & IoT Security Specialist, Wireless Devices & Applications, TELUS. It provides a detailed progress report on activities related to CITS.

ATIS launched a Connected Car-Cybersecurity initiative in June 2016 and joined the Automotive Information Sharing and Analysis Center (Auto-ISAC) as a strategic partner. The main objective is to provide enhanced security for connected vehicles. ATIS is working on a connected vehicle security framework involving various partners and published in August 2017 a White Paper entitled [*Improving Vehicle Cybersecurity: ICT Industry Experience & Perspectives*](https://access.atis.org/apps/group_public/download.php/35648/ATIS-I-0000059.pdf). ATIS invites and encourages further collaboration between the ICT Industry and Vehicle OEMs, as well as between ATIS and the Auto-ISAC.

**4.12 TIAA**

[[Doc 14](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/14-TIAA%20China_presentation_to_CITS.ppt)] was submitted by TIAA, China, and presented by Li Jun, TIAA, Global Vision. It provides information on TIAA organization, which includes 10 committees including Market, Technology, Standard, IPR and 30 technical groups including V2X, Millimeter-wave Rader, Vehicular Multimedia Broadcast, and Cyber Security. It also highlights the current National Planning of IoV Industry in China as well as related TIAA IoV Projects and activities related to CITS. See the presentation for more detail, it was noted that TIAA approached the ITU to discuss collaboration on ITS.

1. **Status of ITS communications work in ITU**

**5.1** [**Overview of all ITS work items in ITU**](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/ITS-work-items.xlsx)

A [spreadsheet](https://staging.itu.int/en/ITU-T/extcoop/cits/Documents/ITS-work-items.xlsx) (freely available online) collecting information about all ITS related work items in ITU is available. Covering the work of ITU-T (Study Groups 12, 13, 16, 17, 20) and ITU-R (WP5A), the spreadsheet is regularly updated.

**5.2 ITU-T** [**SG12**](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) **(**[**Q4/12**](https://www.itu.int/itu-t/workprog/wp_search.aspx?isn_sp=3925&isn_sg=3931&isn_qu=4155&isn_status=-1,1,3,7&details=0&field=acdefghijo)**)**

[[Doc 22](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/22_ITU-T_SG12_Status-Report-to-CITS.pdf)] was submitted by ITU-T SG12 and provides an updated progress report on activities related to CITS. It was presented by Martin Adolph, ITU/TSB Advisor.

The ITU-T P.1140: *“Speech communication requirements for emergency calls originating from vehicles”* was referenced by a new UN regulation on automatic emergency call system for road traffic accidents.

Six work items, some already approved as ITU-T Recommendations, are being worked by SG12 on “Objective methods for speech and audio evaluation in vehicles”.

Next ITU-T SG12 meeting is planned in Geneva, 1-10 May 2018

**5.3 ITU-T** [**SG16**](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) **(**[**Q27/16**](http://www.itu.int/ITU-T/workprog/wp_search.aspx?isn_sp=3925&isn_sg=3934&isn_qu=4207&isn_status=-1,1,3,7,2&details=0&field=acdefghijo)**)**

There were no updates submitted by ITU-T SG16 as it did not meet since last CITS meeting in Arlington, on 6 December 2017.

Next meeting of SG16 is planned in July 2018 in Ljubljana, therefore an update will be sent to the next CITS meeting planned on 7 September 2018 in Nanjing, China.

For the current status see the [spreadsheet](https://staging.itu.int/en/ITU-T/extcoop/cits/Documents/ITS-work-items.xlsx) mentioned in clause 5.1 above.

**5.4 ITU-T** [**SG17**](https://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/default.aspx) **(**[**Q13/17**](https://www.itu.int/itu-t/workprog/wp_search.aspx?isn_sp=3925&isn_sg=3935&isn_qu=6705&isn_status=-1,1,3,7&details=0&field=acdefghijo)**)**

[[Doc 9](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/09_ITU-T_SG17_updates_2018.03.08.pptx)] was submitted by SG17 representative and provides a detailed progress report on activities related to CITS. It was presented by Koji Nakao, NICT, SG17 representative.

ITU-T SG17 held an interim meeting of the new Q13/17 “Security Aspects for ITS communications” in Seoul, late January 2018. Current work includes a work plan for security aspects of cloud-based EDR (Event Data Recorder). The meeting also progressed draft ITU-T Recommendations: X.itssec-2 – Security Guidelines for V2X Communication Systems; X.itssec‑3 – Security requirements for vehicle accessible external devices; X.itssec‑4 – Methodologies for intrusion detection system on in-vehicle systems

SG17 actively participate in UN Task Force on Cyber Security and OTA Issues (CS/OTA). Coordination mechanisms are in place and the progress of work synchronized.

ISO/TC204/WG18 and SG17/Q13 are coordinating to hold a face-to-face (F2F) meeting to seek collaboration and coordination on common ITS security topics. Q13/17 will also discuss liaison relationship with ITU-T SG16 and SAE at their next SG17 meeting planned on 20–29 March in Geneva.

**5.5** [**SG20**](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) **(**[**Q2/20**](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q2.aspx)**,** [**Q4/20**](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx)**)**

[[Doc 12](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/12-Update%20ITU-T%20SG20-activities-on-ITS.pdf)] was submitted by a SG20 representative and provides an updated progress report on activities related to CITS, since the last meeting of CITS in Arlington. It was presented remotely by Marco Carugi, NEC.

SG20 has approved two Recommendations: ITU-TY.4116 *“Requirements of transportation safety services including use cases and service scenarios”* and ITU-TY.4119 (ex Y.AERS-reqts) *“Requirements and capability framework for IoT-based automotive emergency response system”* and is currently working on five more draft documents:

– Y.IoT-ITS-framework “Framework of Cooperative Intelligent Transport Systems based on the Internet of Things”;

– Y.TPS-afw “Architectural framework for providing transportation safety services”;

– Y.AERS-mtp “Minimum set of data transfer protocol for automotive emergency”;

– Y.AERS-msd “Minimum set of data structure for automotive emergency response system” and

– Y.IoT-UAS-Reqts “Use cases, requirements and capabilities of unmanned aircraft systems for Internet of Things”

See the report for details on approved Recommendations and ongoing work.

About ITU-T SG20 coordination with ISO TC 204, it will be discussed during next SG20 meeting, planned 6-16 May 2018, Cairo, Egypt.

**5.6 ITU-R** [**SG5**](https://www.itu.int/en/ITU-R/study-groups/rsg5/Pages/default.aspx) **(**[**WP5A**](https://www.itu.int/en/ITU-R/study-groups/rsg5/rwp5a/Pages/default.aspx)**)**

[[Doc 11](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/11_ITU-R%20WP5A%20report_ITS-RSTT.pptx)] was submitted by ITU-R SG5 WP5A representative and provides a detailed progress report on activities related to CITS. It was presented by Sergio Buonomo, ITU-R SG5 Counsellor, ITU/BR.

This progress report updates the earlier version submitted in Arlington in December 2017.

It provides information on the ITU-R WP 5A studies in preparation to the ITU World Radio Conference (WRC‑19).

1) Consider possible global or regional harmonized frequency bands for the implementation of evolving Intelligent Transport Systems (ITS) under existing mobile-service allocations, e.g. ITU-R M.[ITS USAGE] *“Intelligent transport systems (ITS) usage in ITU Member States“*; ITU-R M.[ITS\_FRQ] *“Harmonization of frequency [bands/ranges] for Intelligent Transport Systems in the mobile service“*.

2) Facilitate global or regional harmonized frequency bands to support railway radiocommunication systems between train and trackside within existing mobile service allocations, e.g.ITU-R M. [RSTT.USAGE] *“Current and future usage of railway radiocommunication systems between train and trackside (RSTT)”;* ITU-R M.[RSTT\_FRQ] *“Harmonization of frequencies and related frequency arrangements, for railway radiocommunication systems between train and trackside”*; ITU-R M.[90‑GHZ.RSTT.COEXIST] *“Coexistence between high-speed railway radiocommunication system between train and trackside operating in the frequency bands 92-94 GHz, 94.1-100 GHz and 102-109.5 GHz, and active and passive services”*.

3) Finalize the revision of existing ITU-R M.2084-0 *“Radio interface standards of vehicle-to-vehicle and vehicle-to-infrastructure communications for Intelligent Transport System applications”.* WP 5A invites external organizations to submit updated information, if any, on technical standards, and will consider any input contributions at its next meeting in May 2018 to finalize the revision of ITU-R M.2084-0.

Next meeting of WP5A is planned in May 2018.

1. **Review of CITS Terms of reference and outgoing liaison statements**

The Chair submitted a proposal for updating the terms of reference of the Collaboration (CITS). It was found in [[Doc 3](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/03_Chair_revised_ToR_CITS.docx)]. The proposal was presented, reviewed and adopted with no comments. The webpage was updated and the new terms of reference made available.

It was agreed to send a liaison statements to all SDOs and entities with an interest in the Collaboration on ITS Communication Standards, informing them on the updated terms of reference of the CITS and requesting appointment of CITS vice-chairs or liaison officers/representatives. A preliminary list of bodies that would receive such a liaison was submitted as [[Doc 19](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/19_Chair_List_ITS_Organizations.docx)].

1. **Next meeting**

The next Collaboration (CITS) meeting will take place in co-location to the ***“International Forum on ITS (ITS-2018)***” on **6-7 September 2018, Nanjing, China**,hosted by China ITS Industry Alliance. Some preliminary information were submitted and posted as [[Doc 20](https://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20180309-Geneva/20_International_ITS_forum_2018_Nanjing-China.pptx)].

1. **Close of meeting**

The Chair, Russ Shields, thanked ITU for hosting the collaboration (CITS) meeting and Stefano Polidori (TSB) for having supported its preparation. He also appreciated ITU and UNECE staff for having successfully co-organized the 13th edition of the Symposium on the Future Networked Car ([FNC-2018](https://www.itu.int/en/fnc/2018/Pages/default.aspx)). Finally the Chair expressed appreciation to all participants that joined physically or remotely and especially for their inputs and the fruitful discussions. The meeting closed at 1400 local time.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_